

NIKITINA, Ye.V.; AYDAROVA, R.A.; KASHCHENKO, L.I.; UBUKEYEVA, A.U.;  
POPOVA, L.I.; TKACHENKO, V.I.; GOLOVKOVA, A.G., SHPOTA, Ye.I.;  
~~FILATOVA, N.S.~~; SHARASHOVA, V.S.; VVEDENSKIY, A.I., nauchnyy red.;  
VYKHODTSEV, I.V., red.; ANOKHINA, M.G., tekhn.red.

[Flora of the Kirghiz S.S.R.; key to the plants of the Kirghiz  
S.S.R.] Flora Kirgizskoi SSR; opredelitel' rastenii Kirgizskoi  
SSR. Sost. B.V.Nikitina i dr. Nauchn.red. A.I.Vvedenskii. Frunze,  
Izd-vo Akad.nauk Kirgizskoi SSR. Vol.8. [The carrot, dogwood, winter-  
green, heath, primrose, leadwort, olive, gentian, dogbone, milkweed,  
and morning-glory families] Semeistva: zontichnye, kizilovye, grushan-  
kovye, vereskovye, pervotsvetnye, svinchatkovye, maslinovye, gore-  
chavkovye, kutrovye, lastovnevye, v'iunkovye. 1959. 222 p. Vol.9.  
[The mint and nightshade families] Semeistva: gubotsvetnye i pasle-  
novye. 1960. 213 p. (MIRA 13:?)  
(Kirghizistan--Dicotyledons)

NIKITINA, Ye.V.; AYDAROVA, R.A.; FILATOVA, N.S.; UBUKEYEVA, A.U.;  
SUDNITSINA, I.G.; LYSOVA, N.V., otv. red.; BUTENKO, N.P..  
red. izd-va; ANOKHINA, M.G., tekhn. red.

[Trees and shrubs of the populated areas of Kirghizistan; a  
popular guide] Derev'ia i kustarniki naselennykh punktov Kir-  
gizii; populjarnyi opredelitel'. Sost. E.V.Nikitina i dr.  
Frunze, 1960. 249 p. (MIRA 14:5)

1. Akademija nauk Kirgizskoy SSR. Institut botaniki.  
(Kirghizistan--Trees) (Kirghizistan--Shrubs)

FILATOVA, N.S.

Guide to the wormwoods of Kazakhstan. Trudy Inst. bot. AN  
Kazakh. SSR 15:204-236 '63. (MIRA 16:9)

NIKITINA, Ye.V.; AYDAROVA, R.A.; UBUKEYEVA, A.U.; FILATOVA, N.S.;  
SUDNITSYNA, I.G.; TKACHENKO, V.I.; SHARASHOVA, V.S.;  
KASHCHENKO, L.I.; SHPOTA, Ye.I.; VVEDENSKIY, A.I., nauchnyy  
red.; VYKHODTSEV, I.V., otv. red.; SORONBAYEVA, N.V., red.  
izd-va; ANOKHINA, N.G., tekhn. red.

[Flora of the Kirghiz S.S.R.; classification key of the plants  
of the Kirghiz S.S.R.] Flora Kirgizskoi SSSR; opredelitel' ra-  
stenii Kirgizskoi SSSR. Sost. E.V.Nikitina i dr. Nauchn. red.  
A.I.Vvedenskii. Frunze, Izd-vo Akad.nauk Kirgizskoi SSR.  
Vol.10. [Families: Cuscutaceae, Polemoniaceae, Boraginaceae,  
Verbenaceae, Scrophulariaceae, Bignoniaceae, Orobanchaceas,  
Lentibulariaceae, Plantaginaceae, Rubiaceas, Caprifoliaceas,  
Adoxaceae, Valerianaceae, Morinaceas, Dipsacaceas, Cucurbitaceas,  
Campanulaceae, Lobeliaceae] Semeistva: Povilikovye, Siniukhovye,  
Burachnikovye, Verbenovye, Nrichnikovye, Bignonievye, Zarazi-  
khovye, Puzyrchatkovye, Podorozhnikovye, Marenovye, Zhimolostnye,  
Adoksovye, Valerianovye, Morinovye, Vorsiankovye, Tykvennye,  
Kolokol'chikovye, Lobelievye. 1962. 387 p. (MIRA 15:9)  
(Kirghizistan—Dicotyledons)

NIKITINA, Ye.V.; AYDAROVA, R.A.; DZHANAYEVA, V.M.; UBUKEYEVA, A.U.;  
AREAYEVA, Z.S.; SUDNITSYNA, I.G.; SULTANOVA, R.M.; GORBUHOVA,  
N.V.; TKACHENKO, V.I.; FILATOVA, N.S.; CHERNEVA, O.V.;  
VVEDENSKIY, A.I., nauchn. red.; VYKHODTSEV, I.V., otv. red.

[Flora of the Kirghiz S.S.R.; a guide to the plants of the  
Kirghiz S.S.R.] Flora Kirgizskoi SSR; opredelitel' rastenii  
Kirgizskoi SSR. Frunze, Ilim. Vol.11. 1965. 606 p.  
(MIRA 18:11)

FILATOVA, N.V.

USSR/ Physics - Absorption of gases

Card 1/1 Pub. 86 - 17/37

Authors : Chmutov, K. V., Mem. Corresp. Acad. Sci. USSR; and Filatova, N. V.

Title : Model setup of a process for the absorption of gases, vapors and dissolved substances

Periodical : Priroda 43/10, 95-96, and insert, Oct 1954

Abstract : The reclaiming of gases, vapors and dissolved substances by an absorption or adsorption process is described. A model setup of the apparatus is shown. The process consists of passing an uninterrupted stream of a mixture or solution through layers of a granulated substance placed in a tube, chamber or very-long column. Illustrations; graphs.

Institution : ...

Submitted : ...

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000413020019-1

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APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413020019-1"

S/844/62/000/000/102/129  
D204/D307

AUTHORS: Kiseleva, Ye. D., Chmutov, K. V., Krupnova, V. N. and  
Filatova, N. V.

TITLE: The effect of the exchanging ion and of linking on the  
radiation stability of ion-exchange resins

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khi-  
mii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962,  
603-610

TEXT: The present work is part of a systematic search for radia-  
tion-stable ion-exchange resins. The effect of cross-linking was  
studied on cationites C<sup>+</sup>U-2 (SBS-2, a copolymer of styrene and bu-  
tadiene) and on Ky-2 (KU-2, copolymer of styrene and divinylbenze-  
ne). The irradiation was carried out in water, by a method described  
earlier (ZhFKh, 25, 1816 (1961)) using the linear accelerator of  
the authors' Institute, the dose being (0.2 - 2.1) x 10<sup>23</sup> ev/g.

The exchange capacity of KU-2 in the H<sup>+</sup> form decreased on irradia-  
tion and was generally higher for higher contents (2 - 16%, great-

Card 1/3

S/844/62/000/000/102/129

D204/D307

The effect of the ...

est at 12% of divinylbenzene (DVB); new exchanging groups, with a pK of 7.5 appeared in amounts increasing with the dose, independently of the DVB content which denotes the degree of linking. The percentage swelling on irradiation depended on the content of DVB and was lowered by doses exceeding  $\sim 0.7 \times 10^{23}$  ev/g. The selectivity

w.r.t. the  $C_s^+$  ion, characterized by exchange constant  $k_{H,C_s}^+$ , was generally lower for lower constants of DVB and varied irregularly with the dose, remaining little changed on the average. The pH rose from ~2 for unirradiated to ~12 for irradiated KU-2 ( $0.7 - 1.1 \times 10^{23}$  ev/g, 12 - 16% DVB).  $Cu^{2+}$ ,  $Cr^{3+}$ ,  $Fe^{3+}$  and  $UO_2^{2+}$  forms of KU-2 lost their exchange capacity more slowly than the  $H^+$  form, but the degree of swelling rose from 90 to 180% for a dose of  $1.4 \times 10^{23}$  ev/g. The radiation stability of KU-1 (a sulfonated phenolic type) treated in a similar manner, was higher than that of KU-2; the properties remained essentially unchanged. SBS-2 largely retained its exchange capacity for doses up to  $2.16 \times 10^{23}$  ev/g, but the percentage swelling went through a minimum of ~20% at  $\sim 0.5 \times 10^{23}$  ev/g.

Card 2/3

The effect of the ...

S/844/62/000/000/102/129  
D204/D307

The properties of an anionite AB-17 (AV-17) remained essentially unchanged when the resin was irradiated, in various ionic forms. The changes in the properties of KU-2 are ascribed to changes in the structure of the resin, resulting from the fission of C-S and C-C bonds, followed possibly by interaction with the radiolysis products of water. There are 11 figures and 2 tables.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry, AS USSR)

Card 3/3

KISELEVA, Ye.D.; CHMUTOV, K.V.; FILATOVA, N.V.

Radiation stability of ion-exchange resins. Part 3.  
Zhur. fiz. khim. 36 no.11:2465-2468 N'62. (MIRA 17:5)

1. Institut fizicheskoy khimii AN SSSR.

KOMAROVA, N.K.; FILATOV, N.V.; DMITRIYEV, L.I., red.

[Overall mechanization of straw harvesting] Kompleksnaya  
uborka solomy. Moskva, Rossel'khozizdat, 1964. 51 p.  
(MIRA 17:7)

i. Vserossiyskiy nauchno-issledovatel'skiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (for  
Komarova, Filatov).

SHENAYEVA, K.I.; SHUMILOV, G.A.; FILATOVA, O.A.

Hungarian instruments for the testing of textiles and fibers.  
Tekst.prom.15 no.7:42-45 J1'55. (MLRA 8:10)  
(Hungary--Textile industry--Testing)

Filatova, O.A. 28-58-2-10/41

AUTHOR: Filatova, O.A.

TITLE: Determining the Shrinkage Value of Fabrics (Opredeleniye velichiny usadki tkaney)

PERIODICAL: Standartizatsiya, 1958, № 2, pp 33-35 (USSR)

ABSTRACT: The article contains information on a method of evaluating the shrinkage of fabrics in laundering, developed by TsNIKhBP and accepted for the standard ("GOST 8710-58"). The method is based on the results of Soviet and foreign experiments and the recommendations of the International Standard Organization. Details of the method are given. The shrinkage obtained in such tests corresponds to the shrinkage caused by 4-5 common launderings. A big test, carried out on fabrics of staple viscose fiber at the Moskovskiy tekstil'nyy institut (Moscow Textile Institute), by Professor G.N. Kukin, Dotsent F.Kh. Sadykova, Professor A.N. Solov'yev, and Candidate of Technical Sciences N.Ya. Tret'yakova is mentioned. There is 1 table.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut khlopcatobumazhnay promyshlennosti (Central Scientific Research Institute of the Cotton Industry)

AVAILABLE: Library of Congress  
Card 1/1 1. Textiles-Shrinkage-Measurement 2. Standardization-USSR

EYGES, Ye.G., kand.tekhn.nauk, starskiy nauchnyy sotrudnik; FILATOVA, O.A.,  
starshiy nauchnyy sotrudnik

Consultation. Tekst.prom. no.2:93-94 F '63.

(MIRA 16:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut khlopcatobumazhnoy  
promyshlennosti (TsNIKhBI).

(Spinning)

FILATOVA, O.A.

Determining the impurity of cotton yarn. Standartizatsia 27  
no. 3:43-46 Mr '63. (MIRA 16:4)  
(Cotton yarn—Testing)

FILATOVA, O.A.

Classification of shrinkage norms for textile fabrics after  
washing. Standartizatsiia 27 no.4153-55 Ap '63.

(MIRA 16:4)

(Cotton fabrics--Standards)

BOLOVIN, A.N.; EYGES, Ic.G.; YAROSLAVTSEV, K.V.; FILMOVA, G.A.

Determination of the thickness of fibers and threads by the  
"tex" system. Standartizatsia 27 no.12:50-52 D '63.

(MIRA 174)

KOTKOV, I.I.; BESLIKOV, B.S., v.o.golovnogo inzhenera; TRAKHTENBERG, M.Yu.,  
golognyi konstruktor; KLEVAYCHUK, P.I.; JILATOVA, O.I.; KRAVCHENKO,  
O.M.; RODENKO, G.O.; BARDASH, O.P., spetredaktor

[Dwellings of two rooms and a kitchen-dining room] Zhylyi budynok na  
dvi kimmaty z knkhneiu-idal'neiu. Proekt No.075. Kyiv, Vyadvnychiy  
viddil, 1953. 18 plans. (MLRA 9:12)

1. Ukraine. Upravlinnya v spravakh sil'skogo i kolgospnogo  
budivnytstva. 2. Direktor Diprosil'budu (for Kotkov) 3, Kerivnik  
APM-3 (for Klevaychuk)  
(Dwellings)

FILATOVA, R. I.  
USSR/Chemistry

Card 1/1

Authors : Ayrapetova, R. P.; and Filatova, R. I.

Title : Calculation of viscosity of binary systems. Part 1. -

Periodical : Zhur. Ob. Khim. 24, Ed. 5, 799 - 802, May 1954

Abstract : The viscosity of five binary systems was calculated in accordance with the G. M. Panchenkov formula. The calculated data obtained were in perfect conformity with the experimental values. A bond energy-composition diagram was prepared. The presence of maxima on the bond energy-composition-curve confirms the presence of a chemical reaction between the components. The bond energy-composition-curves, arched toward the axis of the abscissa, indicates the absence of a chemical reaction. Four USSR references. Tables, graphs.

Institution : Central Asiatic State University

Submitted : October 19, 1953

Evaluation B-  
83873, 28 Nov 51'

L 15323-65 AND

ACCESSION NR: AP4041409

S/0240/64/000/c06/0054/0056

AUTHOR: Filatova, R. I. (Engineer-Technologist)

TITLE: Determination of the biochemical oxygen requirement for biologically purified sewage

SOURCE: Gigiyena i sanitariya, no. 6, 1964, 54-56

TOPIC TAGS: sewage, sewage purification, biological purification, requirement, dilution method, pasteurization, met. v. blue

ABSTRACT: In biological purification of sewage, oxidation of carbon-bearing substances and oxidation of nitrogen-bearing substances can take place simultaneously. The present study considers two methods of determining the oxygen requirement for oxidation of nitrogen-bearing substances. At the Central Scientific Research Institute of the Kozhukhovskaya Wastewater Treatment Plant, a method for purified sewage was determined which is the most rapid, simple and simplest method. It consists of a single dilution, treatment with pasteurization, and a single titration. Findings

Card 1/2

L 15323-65  
ACCESSION NR: AP4041409

show that the oxygen requirement determined by dilution with pasteurization is 3 to 4 mg/l lower than for dilution with methyl salicylate washing of the effluent. This is a significant

... and with nearly twice as much time spent at and in each name method, reducing analysis time and, most important, the possibility of error due to the different interpretation of classification conditions. Orig. art. has: a Fig. 203.

ASSOCIATION: Tsentral'naya nauchno-issledovatel'skaya laboratoriya  
pred'ia "Mosochistovod", Moscow (Central Scientific-Research  
Association of the Board of the "Mosochis pred")

SUBMITTED: 06Oct63 ENCL: 00 SUB CODE: LS

NR REF SOV: 005 OTHER: 001

SUB CODE: LS

Card 2/2

L 6797-65 EAT(n)/EP1(u)-2/EWA(n)-2 LF(c)  
URSS 4572 510275/64/cos/044/1053/1053  
621.384.6

AUTHOR: Ref. Zh. Elektronika i yeye primeneniye. Svednyy t-e, Abs. 11A332

AUTHOR: Morozov, B. N.; Karanov, V. N.; Potekhin, Yu. I.; Shishenina, L. G.  
Filatova, R. N.

TITLE: Accelerating system of the waveguide-type cyclic accelerator

JOURNAL: Sb. Elektron. uskoriteli. M., Vyssh. shkola, 1964, 138-147

accelerator, cyclic accelerator, waveguide type accelerator

TRANSLATION: Calculation of parameters of an accelerating system of the waveguide-type cyclic accelerator is presented; the results of an experimental investigation are given. It is shown that the calculated values of the current according to these calculations correspond to the experimental and estimated datae are in good agreement.

SUB CODE: EX

ENCL: 00

433  
Card 1/1

VOROB'YEV, A.A.; DIDENKO, A.N.; LISITSYN, A.I.; MOROZOV, B.N.; POTEKHIN, Yu.I.;  
SALIVON, I.G.; FILATOVA, R.M.

A 10-Mev. wave-guide type synchrotron. Atom. energ. 18 no.6:633-634  
Je '65. (MIRA 18:7)

L 3b60-66 ENT(m)/EPA(w)-2/EWA(m)-2 LJP(c) DM  
ACCESSION NR: AP5016934

UR/0089/65/018/006/0633/0634  
621.384.612

AUTHORS: Vorob'yev, A. A.; Didenko, A. N.; Lisitsyn, A. I.;  
Morozov, B. N.; Potekhin, Yu. I.; Salivon, L. G.; Filatova, R. M.

TITLE: 10 MeV waveguide synchrotron

SOURCE: Atomnaya energiya, v. 18, no. 6, 1965, 633-634

TOPIC TAGS: synchrotron, circular accelerator, electron accelerator,  
high energy accelerator, waveguide

ABSTRACT: After first listing some of the theoretical problems involved in the design of accelerators of this type and dealt with at Institut yadernoy fiziki Tomskogo politekhnicheskogo instituta (Scientific Research Institute of Nuclear Physics of the Tomsk Polytechnic Institute), the authors describe briefly the 10 MeV synchrotron constructed and in operation at this institute since December 1963. The accelerating system is a rectangular waveguide bent in the shape of a ring, loaded with diaphragms on the outer wall. A standing  $H_{018}$  mode

Card 1/3

L 3460-66

ACCESSION NR: AP5016934

in the  $\pi/2$  mode is excited in the waveguide. The radius of the equilibrium orbit of the electrons, on which the phase velocity of the  $H_{018}$

wave is equal to the velocity of light, is 13 cm. The waveguide interaction space measures 6 x 6 cm. The system Q is approximately 300, the shunt resistance is approximately 0.07 Meg. The electrons are first accelerated to 3 MeV in the betatron mode by a Kerst gun. The high-frequency electromagnetic oscillations are generated by a pulsed 10-cm generator of 5,000  $\mu$ sec pulses of 400 W each. The operating pressure is  $2 \times 10^{-5}$  mm Hg. Several of the control and construction features are briefly described. We thank the students of the Tomsk Polytechnic Institute V. I. Zhuravlev, A. M. Voloshin, P. I. Matyazh, A. A. Kushch, and A. N. Pershin, who participated in the adjustment and startup of the installation, and also Ye. S. Kovalenko and A. P. Ol'shanskiy for participating in the development of the accelerator theory, its design, and model test. Orig. art. has: 1 figure

ASSOCIATION: None

Card 2/3

L 3460-66  
ACCESSION NR: AP5016934

SUBMITTED: 09Jul164 ENCL: 00 SUB CODE: NP  
NR REF Sov: 007 OTHER: 001

BVK  
Card 3/3

ACC NR: AT7003994

SOURCE CODE: UR/0000/66/000/000/0075/0082

AUTHOR: Vorob'yev, A. A.; Bezmaternykh, L. N.; Didenko, A. N.; Filatova, R. M.

ORG: Scientific Research Institute of Nuclear Physics, Electronics, and Automation, Tomsk Polytechnic Institute (Nauchno-issledovatel'skiy institut yadernoy fiziki, elektroniki i avtomatiki pri TPI)

TITLE: Waveguide accelerating systems with walls not shielding the control magnetic field

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 75-82

TOPIC TAGS: waveguide, ~~accelerator~~, cyclic accelerator, particle acceleration

ABSTRACT: A multilayer-dielectric coating similar to that used in Fabry-Perot interferometers (W. Gulshaw, Proc. Phys. Soc., London, v. 66, sec. B, 597, 1953) and in lasers (J. Franklin Inst., 273, 177, 1962) is proposed for the walls of waveguide-type accelerators. Uniformly bent smooth and septate closed

Card 1/2

ACC NR: AT7003994

rectangular waveguides with multilayer-dielectric walls are theoretically and experimentally investigated. Formulas for the rejection frequency of a periodic multilayer structure, for attenuation, and for the total electromagnetic-wave losses due to reflection from a multilayer dielectric are derived. A length of standard 72 x 34-mm waveguide whose ends were closed by multilayer-dielectric walls was excited by TE<sub>101</sub>-mode at  $\lambda = 10,182$  cm; at room temperature, Q = 1800. Findings: (1) At a fixed frequency, the field structure in the above system does not differ from that in an all-metal system; (2) Use of TE-modes is preferable; inside the multilayer wall, the field attenuates rapidly; with proper selection of wall parameters, no hazard of dielectric breakdown by SHF high power will exist; (3) The above multilayer-dielectric walls are feasible if Sr and Ba titanates are used as materials (see R. O. Bell et al., IRE Trans., MTT-9, 239, 1961). Orig. art. has: 3 figures, 15 formulas, and 1 table.

SUB CODE: 09 / SUBM DATE: 06Mar66 / ORIG REF: 001 / OTH REF: 003

Card 2/2

FILATOVA, R.S. [Fylatova, R.S.]

Sex differences in the morphological composition of rat blood.  
Fiziol. zhur. [Ukr.] 5 no.3:346-351 My-Je '59. (MIRA 12:10)

1. Institut fiziologii im. O.O.Bogomol'tsya AN URSR, laborato-  
riya endokrinnikh funktsiy.  
(SEX (BIOLOGY)) (BLOOD--ANALYSIS AND CHEMISTRY)

FILATOVA, R.S.

Effect of sex hormones on the morphologic composition of blood in rats.  
Fiziol. zhur. [Ukr.] 8 no.2:231-237 Mr-Ap '62. (MIRA 15:5)

1. Laboratoriya endokrinologii Instituta fiziologii im. A.A.Bogomol'tsa  
AN USSR, Kiyev.  
(HORMONES, SEX) (BLOOD CELLS)

FILATOVA, R.S....

Effect of prolonged administration on testosterone propionate on the morphological composition of the blood of adrenalectomized rats. Fiziol. zhur. [Ukr.] 9 no.6:754-758 N-6 '63.

(MIR) 17:8)

1. Laboratoriya endokrinnnykh funktsiy Instituta fiziologii im. Bozomel'tsa AN UkrSSR, Kiyev.

ZEFIROV, N.S.; FILATOVA, R.S.; YUR'YEV, Yu.K.

Behavior of dimethyl ester of 3-kromo-3,6-endoxohexahydro-phthalic acid in solvolysis. Zhur. ob. khim. 34 no.7: 2468-2469 J1 '64 (MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

ZEFIROV, N.S.; IVANOVA, R.A.; FILATOVA, R.S.; YUR'YEV, Yu.K.

Deamination of methyl ester of exo-cis-2-amino-3,6-endoxo-hexahydrophthalic acid. Zhur. ob. khim. 33 no.10:3440-3441  
O '63. (MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet.

KETJROV, N.S.; VANOV, R.K.; TIKATOVA, R.S.; YUR'YEV, Yu.K.

3,6-Endoxocyclohexanes and  $\alpha$ -cyclohexenes. Part 26; Wagner-Meerwein rearrangement in deamination of 3,6-endoxocyclohexahydrc-anthrancene acid and its methyl ester. Zhur. ob. khim. 35 no.10, 798-1801 O '65. (MERA 18:10)

1. Moskovskiy gosudarstvennyy universitet.

L 1817-66 ENT(m)/EPF(c)/EWP(j) RM  
ACCESSION NR: AP5025127

UR/0079/65/035/010/1807/1811  
547.592.12.2:547.463

AUTHOR: Zefirov, N. S.; Filatova, R. S.; Yur'yev, Yu. K.

TITLE: 3,6-Endooxacyclohexanes and -cyclohexenes. 28. Reactions of exo- and endo-dimethyl esters of 1-bromo-7-oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1807-1811

TOPIC TAGS: oxabicyclic compound, heterocyclic compound, reaction mechanism, solvolysis

ABSTRACT: This work is a continuation of research on bicyclic compounds bearing a halogen atom at the bridge. Nucleophilic substitution is usually strongly inhibited in this class of compounds. Reactions following the  $SN_2$  mechanism cannot take place because the back-side approach of the nucleophile preceding the Walden inversion is prevented. The  $SN_1$  reactions, on the other hand, require the formation of a planar carbonium-ion intermediate, prevented by the rigid cage structure. It was of interest to determine whether more stable carbonium ions could be formed by bridge-halogenated oxabicyclic compounds, in which the carbonium ion would be stabilized by the adjacent ether function. The preparation of the exo(I) and

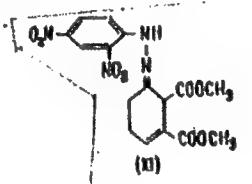
Card 1/3

L 1817-66

ACCESSION NR: AP5025127

3

endo-dimethyl esters of 1-bromo-7-oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid (II) had been described in an earlier paper. Solvolysis of both I and II is extremely slow. Boiling of I and II with aqueous ethanol in the presence of silver nitrate does not produce a precipitate of silver bromide, not even after several hours. Treatment with sodium acetate in acetic acid causes cis-trans isomerization of I. Alkaline hydrolysis leads to saponification without removing the bromine atom. Treatment of I and II with sodium methoxide in methanol, however, produced a rapid appearance of bromide ions in solution. An unstable oil is formed which readily yields a 2,4-dinitrophenylhydrazone. Infrared and ultraviolet spectral data indicate that the structure of the hydrazone is



Orig. art. has: 2 formulas.

[VS]

ASSOCIATION: Moskovskiy gosudarstvenny universitet (Moscow State University)

Ad 55

Card 2/3

L 1817-66

ACCESSION NR: AP5025127

SUMMITTED: 23Dec64

ENCL: 00

SUB CODE: OC, GO

NO REF Sov: 004

OTHER: 012

ATD PRESS: 411

Card 3/3

LYTKIN, Nikolay Konstantinovich; FUSHKIN, P.S., kand. ekonom. nauk,  
retsenzent; FILATOVA, S.A., reteazent; MADONOV, A.A., nauch-  
nyy red.; PLIVYANNIKOV, M.N., red.; VINOGRADOVA, G.A., tekhn.  
red.

[Economics, organization and planning in the leather enterprises]  
Ekonomika, organizatsiya i planirovaniye kozhevennykh pred-  
priatiy. Moskva, Izd-vo nauchno-tekhn.lit-ry RSFSR, 1961. 359 p.  
(MIRA 15:2)

(Leather industry)

VERKHOVSKIY, I.M.; VINOGRADOV, N.N.; FILATOVA, S.M.; KOLISOV, R.I.; KOLLODIY,  
K.K.; GOLOVNIN, Yu.M.; GANOV, V.S.; SOROKIN, A.I.

Device for controlling the degree of loosening of the bed in a  
jigging machine. Gor. zhur. no.7:72 Jl '64. (MIRA 17:10)

GORSHKOV, Andrey Andreyevich; ZATULOVSKIY, Sergey Semenovich,  
inzh.; RUDENKO, Nikolay Grigor'yevich, inzh.; VOLOSHCHENKO,  
Mikhail Vasil'yevich, kand. tekhn. nauk; KLIBUS, Vladimir  
Vasil'yevich, inzh.; LUZHAN, Petr Petrovich, kand. tekhn.  
nauk; KRAMARENKO, Oksana Yur'yevna, kand. tekhn. nauk;  
KULIKOVSKAYA, Ol'ga Varfolomeyevna, inzh.; FILATOVA, T.A.,  
red.

[Cast iron with spheroidal graphite treated by rare-earth  
modifiers; problems of theory and practice] Chugun s sharo-  
vidnym grafitom, obrabotannyi redkozemel'nymi modifikatora-  
mi; voprosy teorii i praktiki. Kiev, Naukova dumka, 1964.  
161 p.

(MIRA 17:11)

1. Akademiya nauk URSR, Kiev. Institut problem lit'ia.
2. Chlen-korrespondent AN Ukr.SSR (for Gorshkov).

SILIN, Nikolay Aleksandrovich; VITOSHKIN, Yuriy Konstantinovich;  
KARASIK, V.M., kand. tekhn. nauk, otv. red.; FILATOVA, T.A.,  
red.

[Hydraulic conveying of coal in pipes and methods of its  
calculation] Gidrotransport ugliia po trubam i metody ego  
rascheta. Kiev, Izd-vo AN USSR, 1964. 86 p.  
(MIRA 18:2)

VOVK, Aleksey Anufrievich; CHERNYY, Gelyy Ivanovich; NOVOZILOV,  
M.G., prof., doktor tekhn. nauk, retsenzent; FILATOVA, T.A.,  
red.

[Mining mineral deposits by the combined method] Razrabotka  
mestorozhdenii poleznykh iskopaemykh kombinirovannym sposobom.  
Kiev, Naukova dumka, 1965. 189 p. (MIRA 18:3)

ARTAMONOV, Aleksandr Yakovlevich; FILATOVA, T.A., red.

[Effect of the conditions of working on the physico-mechanical state of ceramic metal materials] Vlijanie uslovii obrabotki na fiziko-mekhanicheskoe sostoianie metallo-keramicheskikh materialov. Kiev, Naukova dumka, (MIRA 18:11) 1965. 262 p.

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000413020019-1

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000413020019-1"

RUKHLYADEVA, A.P.; FILATOVA, T.G.; GRACHEVA, I.M.

Colorimetric method of determining carbohydrates by means  
of anthrone. Trudy TSNIISP no. 8:122-129 '59. (MIRA 14:1)  
(Carbohydrates) (Anthrone)

RUKHLYADEVA, A.P.; FILATOVA, T.G.

Determination of unfermented carbohydrates in intermediate products of alcoholic fermentation. Spirt.prom. 28 no.2:  
11-16 '62. (MIRA 15:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut spirtovoy promyshlennosti.  
(Carbohydrates) (Fermentation)

RUKHLYADEVA, A.P.; FILATOVA, T.G.

Anthrone colorimetric method for determining sugar and starch  
in low concentration suspensions. Sakh. prom. 36 no. 12:37-40  
(MIRA 16:6)  
D '62.

1. TSentral'nyy nauchno-issledovatel'skiy institut spirtovoy  
i likero-vodochnoy promyshlennosti.  
(Sugar—Analysis)  
(Starch—Analysis)  
(Colorimetry)

1. FILATOVA, T. I.
2. USSR (600)
4. June Bug (Lachnostenra)
7. Controlling grubs of the June bug in forest nurseries.  
Les i step' 4 No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassified.

31632

94930 (1532)  
24.6714

S/056/62/042/002/004/055  
B102/B138

AUTHORS: Demirkhanov, R. A., Leont'yev, N. I., Kosyy, I. A., Filatova,  
T. M.

TITLE: Plasma instability in a toroidal discharge excited by a  
traveling electromagnetic field

PERIODICAL: Zhurnal eksperimental'nyy i teoreticheskoy fiziki. v. 42  
no. 2, 1962, 338 - 343

TEXT: The oscillation frequency of a plasma produced by traveling electro-  
magnetic H-waves in a toroidal glass chamber was studied experimentally  
in dependence on the discharge parameters. The traveling field was pro-  
duced by a delay-line spiral with  $R_{\text{wave}} = 16.5$  ohms, fed by 900 kc pulses ✓  
of 250 kw, duration  $\tau = 4\text{ msec}$ .  $H_{\text{max}}$  at the inner chamber walls was 150 oe.  
The phase velocity of the wave along the delay line was  $5.6 \cdot 10^7$  cm/sec.  
The toroidal chamber was 180 mm in diameter, tube diameter 40 mm initial  
pressure  $10^{-6}$  mm Hg, pressure during operation  $4 \cdot 10^{-3} - 1 \cdot 10^{-1}$  mm Hg. In  
Card 1/3

S/056/62/042/002/004/055  
B102/B138

Plasma instability ...

spectroscopic measurements of a hydrogen discharge only the Balmer series was found. The radial distributions of the field components were measured with and without plasma. Some of the experiments were made in a uniform traveling field with closed delay-line spiral. At two points, where the phase shift was 90° and 8 waves were traveling along the line, with both generators operated at 1Mw and 1.5 Mc.  $H_{max}$  at the inner wall was 1100 oe

without, and ~550 oe with, plasma. The charged particle concentration was measured with two electric probes, azimuthal currents with a Rogovskiy band and discharge brightness with a photocell. An CFP-1 (SFR-1) camera was used for the high-speed photography. The instabilities observed were oscillations in charged particle concentration, azimuthal current, brightness and h-f magnetic field amplitude. The oscillations were non-sinusoidal but with an error of 15%, so that, with some approximation the envelope of the probe signals could be expanded into a Fourier series. Their frequency increased with  $H_z$ . At the maximum azimuthal current  $J_z = 530$  a. these oscillations were observed in the whole range of operational pressures. The results show that the SE instabilities can only be due to interactions between  $J_z$  and the plasma. The oscillation frequency observed is of the

Card 2/3

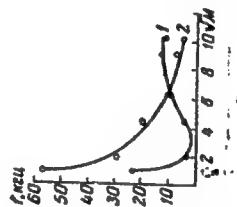
Plasma instability ...

S/056/62/042/002/004/055  
B102/B138

same order of magnitude as that of the ionic "sound", observed by A. V. Nedospasov (Paper No 217, Salzburg Conference on Plasma Physics and Controlled Thermonuclear Reactions, 1961). S. S. Germayeva, E. M. Barkhudarov are thanked for help, S. N. Lozovskiy and I. R. Yampol'skiy for discussions. V. P. Velikhov (Preprint IAE AN SSSR, 1960) and G. V. Gordeyev (ZhETF, 27, 19, 1954) are mentioned. There are 7 figures, 2 tables, and 7 references: 6 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: P. C. Thonemann et al. Nature, 169, 34, 1952.

SUBMITTED: July 6, 1961

Fig. 7. Plasma oscillation frequency ( $\text{kc}$ ) as a function of M atomic weight of the gas. (1) experimental curve, (2) magnetoacoustic frequency.



Cont'd 2/4

L 27596-65 EWT(1)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EWA(m)-2 pz-6/po-4/pab-10/pi-4  
IJP(c) AT

8/0057/85/035/001/0043/0048 66

43B

ACCESSION NR: AP5003234

AUTHOR: Demirkhanov,R.A./ Kossyy,I.A./ Leont'yev,N.I./ Lomovskiy,S.N./ Mavichenko,  
Yu.K./ Filatova,T.M.

TITLE: Interaction of a traveling electromagnetic wave with a plasma

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.1, 1985, 43-46

TOPIC TAGS: plasma, plasma confinement, plasma heating, plasma wave absorption,  
traveling wave

ABSTRACT: An experimental investigation was undertaken to test the possibility of  
confining a plasma by means of a traveling electromagnetic wave as proposed by S.M.  
Osovets (Fizika plazmy i problemy spravlyayemykh termoyadernykh reaktsiy /Plasma  
physics and problems of controlled thermonuclear reactions/ Vol.4,p.3,Izd.AN SSSR,  
1958). A toroidal pulsed machine was employed, similar to that described elsewhere  
by R.A.Demirkhanov et al.(ZhTF 32 '248,1962). Hydrogen plasma was investigated at a  
pressure of 0.06 mm Hg. One megahertz/sec traveling waves were produced with a de-  
lay line terminated in its surge impedance. The phase velocity was  $5.6 \times 10^7$  cm/sec

Cord 1/3

L 27596-65

ACCESSION NR: AP6063234

and the maximum amplitude of the magnetic field was 230 Oe. The electron density and temperature and the longitudinal component of the high frequency magnetic field were measured at various distances from the axis to the discharge tube by means of probes. The electron temperature was approximately constant at 60 000 °K and the electron density was of the order of  $10^{14} \text{ cm}^{-3}$ . From the measured data the gradients of the plasma pressure and the magnetic pressure were calculated. The plasma pressure gradient everywhere exceeded the magnetic confinement of the plasma was accordingly not achieved. Some calculations are presented concerning the behavior of a plasma in a high frequency magnetic field. To achieve confinement it is not sufficient simply to increase the magnetic field strength, for the high frequency field tends to heat the plasma. It is concluded that confinement can be achieved only in an incompletely ionized plasma with a large electron density, in which energy can be transferred from the electrons to the walls of the chamber via the ions and the neutral particle. "The authors express their gratitude to S.V.Kuril'nikov and N.V.Aleksandrov for constructing the power supply for the high-frequency discharge." Orig.art.has: 13 formulas and 2 figures.

2

Card 2/3

L 27596-65

ACCESSION NR: AP5003234

ASSOCIATION: none

SUBMITTED: 16Feb84

ENCL: 00

SUB CODE: ME

NR REF Sov: 006

OTHER: 001

Card 3/3

FILATOVA, T.N.

Thermal regime of lakes in the Karelian Isthmus during ice-free  
periods. Vest.IOU 12 no.6:95-111 '57. (MLRA 10:5)  
(Karelian Isthmus--Lakes)

ELSTOVA, T.E., Cand. Geog. Sci. --(disc) "Formation of thermal regimes  
in certain small lakes of the northwestern part of the European USSR  
during the iceless period." (see, 1952). 10 pp (Len Order  
of Lenin State Univ L.A. Zhdanov), 150 copies (VI, 27-52, 102)

-5-

FILATOVA, T.N.

Quantitative calculation on heat exchange in certain lakes. Vest.  
LGU 14 no.6:107-119 '59. (MIRA 12:6)  
(Lakes--Temperature)

KONSTANTINOV, A.R., FIATOVA, T.N.

Evaporation from farm fields in the steppe and forest  
steppe zones of the European part of the U.S.S.R. Trudy  
GGI no.72:70-101 '59. (MIRA13:6)  
(Evaporation) (Wheat--Water requirements)

FILATOVA, T.N.

Study of reservoirs in connection with their contamination by  
sewage. Trudy GGI no.85:37-51 '62. (MIRA 15:6)  
(Kuybyshev Reservoir--Water --Pollution)

FILATOVA, T.N.

Some characteristics of thermal conditions in small lakes in the ice-free period. Trudy GGI no.85:87-108 '62. (MIRA 15:6)  
(Lakes--Temperature)

FILATOVA, T.N.; MUKHACHEVA, I.A.

Studies of currents in inland bodies of water based on the example  
of the Tsimlyansk Reservoir. Trudy GGI no.113:82-118 '64.  
(MIRA 17:11)

SHVETS', Grigory Ivanovich [Shvets' Г.І.]; MOLYAK, V.I., knan.  
tekhn., nauk, str. red.; FIL'YOV, T.O., red.

[Characteristics of the water content in Ukrainian rivers]  
[Carakterystyky vodnosti riziek Ukrayiny. Kyiv, Naukova  
dumka, 1964. 190 p.]  
(MIRA 17:11)

MISHIN, A.D.; SEREBRENNIKOVA, A.M.; FILATOVA, T.V.

Obtaining furfurole and organic acids in a composite processing  
of birchwood by hydrolysis. Trudy Inst.khim.IIFAN SSSR no.6:  
87-92 '61. (MIRA 16:2)  
(Furaldehyde) (Wood--Chemistry) (Acids, Organic)

5(3)

AUTHORS: Yakubchik, A. I., Filatova, V. A.

SOV/79-29-8-45/81

TITLE: Investigation of the Chemical Structure of Different Fractions  
of Sodium-divinyl Rubber

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2658-2663 (USSR)

ABSTRACT: A comparative investigation of the degree of branching of the macromolecules of divinyl rubber is of considerable scientific and practical interest, since this problem is related to the interpretation of the polymerization mechanism and with the dependence of the structure of the highly molecular compounds on their properties (Ref 1, and I. Ya. Poddubnyy, Ref 2). In the present paper, the comparative investigation of the chemical structure of eight fractions of sodium divinyl rubber was carried out in order to determine their degree of branching. The separation of the fractions of this rubber was performed by means of fractional precipitation (Ref 3) (Table 1). The chemical structure of the fractions separated was determined by means of oxidizing decomposition of the ozonides (Refs 4,5). The resultant acids (levulinic, acetic, formic, succinic, 1,2,4-butane-tricarboxylic, 1,2,3-propane-tricarboxylic, 1,2,4,6-hexane-tetracarboxylic acid) were separated by means of selective chromatography; according to the chromatograms, the

Card 1/3

Investigation of the Chemical Structure of Different  
Fractions of Sodium-divinyl Rubber

SOV/79-29-8-45/81

percentage content of the carbon skeleton of the polymer in them was also calculated (Table 2. and figure of the chromatogram). The sodium divinyl rubber obtained at 40° was divided into 8 fractions according to the fractional precipitation method, with molecular weights of 835000 up to 20000. According to the methods of infrared spectroscopy, and of ozonolysis, the percentage content of the links (1,2) was determined which is practically the same in all fractions. It was found by means of the ozonolysis that all fractions contain parts with macromolecules of the same structure and comparatively same size. In all fractions macromolecules were found which were branched at the α-methylene groups, and had the same size. This indicates that the branching of the fractions investigated is the same. In the experimental part, the determination of molecular weights, elementary composition, degree of unsaturation (according to the method of Kemp-Vasil'yev, Ref 11), percentage content of double bonds, and the ozonolysis are described in detail. There are 1 figure, 3 tables, and 18 references, 12 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State  
Card 2/3

Investigation of the Chemical Structure of Different  
Fractions of Sodium-divinyl Rubber

SOV/79-29-8-45/81

University)

SUBMITTED: July 19, 1958

Card 3/3

S/080/60/033/005/007/008

AUTHORS: Yakubchik, A.I., Filatova, V.A.

TITLE: The Investigation of the Chemical Structure of Divinyl Rubbers  
Subjected to the Action of  $\gamma$ -Radiation ✓

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, No 5, pp 1177 - 1182

TEXT: The effect of  $\gamma$ -radiation on the chemical structure of divinyl rubbers with a low (14%) and a high (70%) content of 1,2 links was studied. The chemical structure of the rubbers which were subjected to various doses of  $\gamma$ -irradiation was determined by the method of ozonolysis. The mixture of acids obtained in the oxidation decomposition of ozonides was separated by the method of distribution chromatography. The percentage of the carbon skeleton of the polymer was calculated from the chromatograms obtained in the chromatograms obtained do not differ qualitatively from the chromatograms of the initial rubbers irradiated, but the height of the peaks on them decreases when the irradiation dose increases. Based on the decrease of the peak height a conclusion can be drawn on the decreasing number of double bonds in 1,2 and 1,4 links, from which the following sections are built

Card 1/2

S/080/60/033/005/007/008

The Investigation of the Chemical Structure of Divinyl Rubbers Subjected to  
the Action of  $\gamma$ -Radiation

up: 1,4 - 1,4; 1,4 - 1,2 - 1,4; 1,4 - (1,2)<sub>2</sub> - 1,4. In the products of ozonolysis of divinyl rubbers containing 70% 1,2-links and 14% 1,4-links, formic acid and formic aldehyde were determined. In the case of 70% 1,2 links, the content of formic acid and aldehyde decreased, in the second case they increased. It is evident that in the macromolecules with a low content of 1,2 links new sections appear which can form formic acid and aldehyde during ozonolysis.

There are 4 tables, 3 graphs, and 19 references: 12 Soviet, 5 English, 1 German and 1 American

SUBMITTED: November 25, 1959.

Card 2/2

FILATOVA, V.I.

Some data on methyl methacrylate as an atmospheric contaminant.  
Pred.dop.kontsent.atmosf.zagr. no.8:59-76 '64.

(MIRA 18:4)

1. Iz kafedry kommunal'noy gigiyeny TSentral'nogo instituta  
usovershenstvovaniya vrachey.

FIL'CHAKOVA, V.P.

Numerical method of conformal mapping of exterior simply connected domains. Dop. AN URSR no.9:1127-1132 '64.  
(MIRA 17:11)  
1. Institut matematiki AN UkrSSR. Predstavлено академиком  
AN UkrSSR G.N. Savinym [Savin, N.M.].

(A) L 13520-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6001858

SOURCE CODE: UR/0190/65/007/012/2039/2047

AUTHORS: Koton, M. M.; Andreyova, I. V.; Getmanchuk, Yu. P.; Madorskaya, L. Ya.; Pokrovskiy, Ya. I.; Kol'tsov, A. I.; Filatova, V. A.

ORG: Institute of High-Molecular Polymers AN SSSR (Institut vysokomolekulyarnykh soyedineniy AN SSSR)

TITLE: Structure of methacrolein polymers, obtained in the presence of anionic catalysts. 3rd report in the series Polymerization of Acrolein and Its Derivatives

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 12, 1965, 2039-2047

TOPIC TAGS: polymerization, polymer structure, reaction mechanism, catalyst / Nippon Bunko infrared spectrophotometer DS 301, GNM 3 nuclear magnetic resonance spectrometer

ABSTRACT: The structure of polymers obtained from methacrolein and  $\alpha$ -ethylacrolein in the presence of sodium naphthalene and sodium trityl using the method described by M. M. Koton, I. V. Andreyeva, and Yu. P. Getmanchuk (Dokl. AN SSSR, 155, 836, 1964) was investigated. The structure analysis was performed by chemical means: oxime formation, hydrogenation, oxidation with perbenzoic acid, ozonization, as well as by physical means: infrared spectra, using Nippon-Bunko spectrophotometer DS-301, and NMR spectra, using instrument GNM-3. It was established that the rate of conversion of methacrolein and the structure of the obtained polymer are both functions of the polymerization temperature, as illustrated in Fig. 1. Mechanism of the polymerization

Card 1/3

UDC: 678.01:53+678.744

L 13520-66

ACC NR: AP6001858

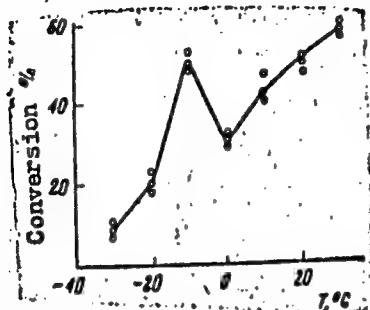
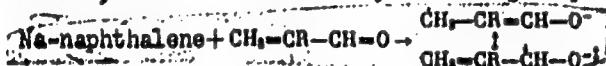
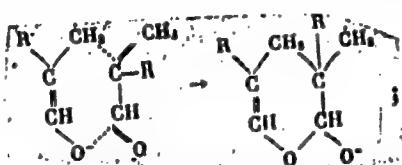


Fig. 1. Degree of methacrolein conversion to polymer within 8 hours as function of temperature. Polymerization conducted in THF in the presence of Na naphthalene (1 mol %).

reaction is offered, and is summarized by following steps:



1) initiation



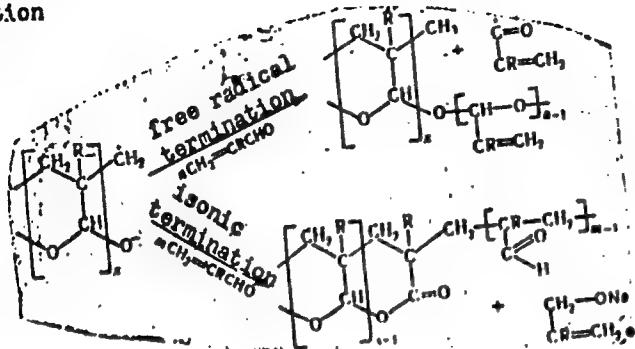
2) propagation

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ACC NR: AP6001858

## 3) termination



At 0°C and above, the termination step occurs mainly along the ionic path. This mechanism explains the formation of the predominantly cyclic structures consisting of condensed tetrahydropyran rings at temperatures below 0°C. Orig. art. has: 3 tables, 6 figures, 4 formulas, and 3 equations.

SUB CODE: 11, 07/

SUBM DATE: 01Dec64/

ORIG REF: 005/ OTH REF: 014

Card 3/3 *AFR*

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413020019-1

FILATOVA, V. S.

"Materials on the Characteristic of Selenium as an Industrial Poison." Thesis for degree of Cand. Medical Sci. Sub 23 Jun 49, First Moscow Order of Lenin Medical Inst.

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernaya Moskva, Jan-Dec 1949.

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413020019-1"

CA

Emergency

11-8

Toxicity of selenium anhydride. V. S. Filatova (1st Moscow Med. Inst.) *Gigiena i Sanit* 1951, No. 5, 18-23. Acute toxicity (white rats) is displayed after a single dose of 0.07-0.09 mg./l. in air; on repeated applications: 0.01-0.03. Lethal value is 0.00 mg./l., i.e. 8 mg./kg. At high doses, both the local site and the entire organism are affected. Toxic edema of lungs and parenchymatous organs are noted, the latter showing degenerative changes. In chronic cases liver, kidneys, heart, and spleen are degenerated (fatty type) and necrosis of heart fibers and hemorrhages into the spleen take place. Permissible limit in air appears to be 0.0001-0.0003 mg./l. G. M. K.

FILATOVA, V.S.

Volatility of selenium and selenious anhydride. Gigiena i Sanit. '53,  
No. 4, 50.  
(CA 47 no.21:10935 '53) (MIRA 6:4)

1. 1st Moscow Med. Inst.

FILATOVA, V. S.

USSR/Safety Engineering. Sanitary Engineering. Sanitation

L.

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 14269

Author : Filatova V.S., Gronberg Ye.Sh.

Title : Sanitary-Hygienic Aspects of Working Conditions in the Manufacture of Polyvinylchloride Resin and Ways of Improving Them

Orig Pub : Gigienna i sanitariya, 1957, No 1, 38-42

Abstract : Sanitary-hygienic conditions of work in the manufacture of polyvinylchloride resins are characterized by the presence in the air of work areas of vapor of vinyl chloride (I), usually at a concentration of 0.05-0.8 mg/liter, and also by a high temperature of the air (26-42° in winter and spring, 33-58° in summer, with the outdoor temperature being, respectively, of -6 (to -14) and 21.5-27.5°). Persons engaged in this work have exhibited cases of toxic angioneurosis, which included cases among women workers at the department of drying of polyvinyl chloride

Card 1/2

- 4 -

FILATOVA, V.S.

ASHBEL', S.I.; FILATOVA, V.S. (Gor'kiy)

Basic tasks in the prevention of occupational poisoning among  
workers of chemical industries. Gig.truda i prof. zab. no.4:  
12-16 J1-Ag '57. (MIRA 10:11)

1. Institut gigiyeny truda i profzabolennii  
(CHEMISTRY, TECHNICAL-SAFETY MEASURES)  
(INDUSTRIAL TOXICOLOGY)

FILATOVA, V.S.; BALAKHONOV, L.I.; GRONZBERG, Ye.Sh. (Gor'kij)

Hygienic aspects of vinyl chloride production. Gig. truda i prof.  
zab. N 1:6-9 Ja-F '58. (MIRA 11:3)

1. Institut gigiyeny truda i profbolezney.  
(PLASTIC INDUSTRY--HYGIENIC ASPECTS)  
(ETHYLENE--TOXICOLOGY)

FILIPPOV, V. S., NOSENKO, YE. SH., BAVTIC OV, I. I.

"Problems of labor hygiene in the production of artificial caustic  
on the basis of vinyl chloride."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists  
and Infectionists, 1959.

GAVRUSEYKO, O.M.; FILATOVA, V.S. (Gor'kiy)

Evaluation of hygienic aspects of some types of drying apparatus used in the chemical industry. Gig.truda i prof.zab. 3 no.1:  
32-39 Ja-F '59. (MIRA 12:2)

1. Institut gigiyeny truda i profzabolevaniy.  
(DRYING APPARATUS)

FILATOVA, V. S.; GRONBERG, Ye. Sh.; BABOCHKINA, M. S. (Gor'kiy)

Problems of industrial hygiene in the production of vinyl chloride  
from acetylene. Gig. truda i prof. zab. no.2:10-15 '62.  
(MIRA 15:2)

1. Gor'kovskiy nauchno-issledovatel'skiy institut gigiyeny truda  
i profbolezney.

(INDUSTRIAL HYGIENE) (ETHYLENE) (ACETYLENE)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413020019-1

FILATOVA, V.S.; GRONBERG, Ye.Sh.; BALAKHOMOVA, L.I.; FAYFERMAN, I.S.

Sanitary and hygienic characteristics of the production of benzyl  
chloride and benzaldehyde. Trudy GIGT no.9:13-20 '62.  
(MIRA 17:9)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413020019-1"

FILATOVA, V.Y.  
CA

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Rapid semimicro colorimetric determination of lithium in minerals and ores. V. A. Nazarenko and V. Ya. Filatova. Zhur. Anal. Khim. 5, 234-8(1950).—The method is based on pptg. LiKFeO<sub>4</sub>, dissolving the ppt. in acid, and detg. colorimetrically Fe as thiocyanate. The amt. of Li is found by multiplying the Fe content by 0.124 (cf. Protske and Šlouf, C.R. 34, 1271; Rogers and Caley, C.A. 37, 2209). To prep. the reagent dissolve 2.3 g. of KIO<sub>3</sub> in 80 ml. of 0.5 N KOH, add 12 ml. of 0.1 M FeCl<sub>3</sub> in 0.2 N HCl while stirring, and dil. with 2 N KOH to 100 ml. To det. Li in silicates fuse 5-20 mg. of finely ground sample with 100-150 mg. of powd. KOH in a Ag crucible. Dissolve the melt in 6-10 drops of H<sub>2</sub>O, transfer to a 3-ml. porcelain crucible, add 0.5-0.6 g. of powd. oxalic acid, evap. carefully, and heat slowly to complete decomposn. of oxalic acid. Moisten with a few drops of 5% (NH<sub>4</sub>)<sub>2</sub>CO<sub>3</sub>, transfer to a centrifuge tube, make up to 2 ml., and centrifuge. Transfer (dry pipet) 1 ml. of the clear soln. to a 3-ml. porcelain crucible, evap. to dryness, add 3-3 drops of concd. HCl, evap., and ignite slightly. Add 0.2 ml. of concd. HCl, 0.8 ml. of 96% alk., keep for 5 min., stirring from time to time, and filter into a similar crucible. Wash

residue in the crucible and on the filter with a mixt. of alk. and HCl (2:1). Evap., filter, ignite slightly, and dissolve in 1-2 drops of H<sub>2</sub>O. Add 1 ml. of N KOH, heat to near boiling, and add 2 ml. of equally hot reagent. Heat for 5 min., and cool in cold H<sub>2</sub>O. Filter with suction, wash 4 times, each with 0.76 ml. of N KOH, and dissolve in 10 ml. of N HCl. Dil. to 25 ml., take 0.5-2 ml., add 0.2 ml. of 20% KCNS, dil. to 3 ml., and det. Fe colorimetrically by the diln. method. Multiply the quantity of Fe found by 0.124 to find the Li. In the case of phosphate minerals fuse as before, dissolve in 8-10 drops of H<sub>2</sub>O, transfer into a microcrucible, add 0.5 N HCl to strong acid reaction, add 0.5 ml. of 5% ZrOCl<sub>2</sub>, evap. to dryness, ignite slightly, treat with 3-5 drops of H<sub>2</sub>O, add oxalic acid, and proceed as above. By this method up to 0.02% of Li can be detd. in a 50-mg. sample with an accuracy of ±10-20%. M. Horch

FILATOVA, Ye.

What should be known about storing tubers and corms. IUn. nat.  
no.10:33 O '58. (MIRA 11:10)  
(Bulbs)

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FE

kinetics of the coking of petroleum asphaltenes. A. M. Brodskii, K. P. Lavrovskii, and E. D. Filatova. *Izvest. Akad. Nauk S.S.R., Otdel. Tekhn. Nauk* 1935, No. 1, 141-4.—The kinetics of asphaltene coking was studied by slowing down the reaction by strong diln. with inert solvents, in this case  $C_6H_6$ . An asphaltene soln. in thiophene-free  $C_6H_6$  (1:100,000) was rapidly heated in a reaction tube to 700°, the vapors were condensed, and the amt. of asphaltene in the distillate was detd. colorimetrically. The coking reaction const. was  $(5.7 \pm 0.5) 10^{-10}$  cc./sec. mol. at 715° and  $(1 \pm 0.1) 10^{-11}$  cc./sec. mol. at 703°. From this the activation energy is calcd. to be  $31 \pm 7$  kcal./mol.

W. M. Sternberg

(1)

2

8/204/62/002/004/006/019  
E075/E436

AUTHORS: Lavrovskiy, K.P., Brodskiy, A.M., Musayev, I.A.,  
Sanin, P.I., Rumyantsev, A.N., Filatova, Ye.D.,  
Iskhakova, E.Kh.

TITLE: On the preparation of higher normal  $\alpha$ -olefines by a  
high speed cracking of paraffinic petroleum products

PERIODICAL: Neftekhimiya, v.2, no.4, 1962, 487-494

TEXT: Results are described of high speed cracking of soft and  
hard paraffin waxes, slack wax from Bitkov crude and waxy residue  
from Ozek-suat crude in a pilot plant. The plant was described  
previously (Khim. nauki i prom-stv, v.2, no.2, 1957). The waxes  
were heated to 900 - 1000°C and mixed with powdered coke preheated  
to 600 - 730°C. They were fed into the reactor at the rate of  
60 to 80 h<sup>-1</sup>. The gases produced (23.0 to 47.4% by weight of  
total products) contained 33.1 to 52.7% wt. ethylene. The fraction  
of the liquid products from the slack wax boiling between 40 - 73°C  
and 73 - 100°C contained heptene-1 as the main component. For the  
hard wax cracking products, the fraction boiling up to 60°C  
contained 49.80%  $\alpha$ -olefines (main component), about 20% conjugated  
dienes and 15 to 12% cyclenes. The content of  $\alpha$ -olefines in  
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On the preparation of higher ...

the 60 - 175°C fraction was 70.4% (13.6% hexene-1, 17.1% heptene-1, 15% octene-1, 11.9% nonene-1, 12.8% decene-1). In general it was shown that the benzenes from the high speed cracking of paraffin waxes consisted mainly of  $\alpha$ -paraffins, their content in benzenes from the cracking of slack wax and waxy residue being much lower. There are 11 tables.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR  
(Institute of Petrochemical Synthesis AS USSR)

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5(4)

SOV/2o-122-6-22/49

AUTHORS: Brodskiy, A. M., Kolbanovskiy, Yu. A., Filatova, Ye. D., Chernysheva, A. S.

TITLE: On the Radiolysis of Heptane (O radiolize geptana)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 6, pp 1035-1038  
(USSR)

ABSTRACT: The present paper investigates the  $\gamma$ -radiolysis of normal heptane in the liquid phase and the radiolysis of a solution of dibenzyl-sulfide in heptane. These investigations were carried out mainly for the following purposes: Determination of the exact kinetics of radiolysis in the initial ranges, determination of the influence of an interruption of irradiation, and determination of the exact composition and yield of the gas within a wide dose-interval (extending over more than 3 orders of magnitude). Dibenzyl-sulfide ( $5.011 \cdot 10^{-4}M$ )\* was added to the heptane for the purpose of clearing up the particular feature of the behavior of aromatic sulphur compounds in the radiation field and for the purpose of determining the influence exercised by the presence of similar additions upon paraffin radiolysis. In the case of small doses, the X-ray

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On the Radiolysis of Heptane

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apparatus РУП-3, and for larger doses  $\text{Co}^{60}$  were used as radiation sources. In the case of small doses, direct proportionality between the gas yield and the duration of radiation was observed. Interruption of irradiation caused a synchronous interruption of gas separation. Otherwise, no "radiation hysteresis" with respect to gas separation was observed, an assertion, which is strictly true. A diagram shows the dependence of the hydrogen- and methane yield on the dose for pure heptane and for a dibenzyl-sulfide solution. Dibenzyl-sulfide reduces heptane radiolysis. Next, the fraction of  $\text{C}_2\text{-C}_5$  gas is investigated; the results of the gas analysis are shown in a table. There follow some comments on the results obtained: 1) The nonlinear effects begin with integral doses of eV/ml and occur in all components. 2) The direct disruption of C-C bonds is of particular importance in the radiolysis of alkanes. 3) The presence of acetylene in the gaseous products of radiolysis is pointed out. 4) Also the great variety of gaseous products of radiolysis is of essential importance (among them there are comparatively many isomeric structures). 5) The gaseous products of a dibenzyl-sulfide solution contain no hydrogen sulfide. In this case the protective effect is due to a transmission of the excitation.

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On the Radiolysis of Heptane

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The authors thank S. I. Mironov, Academician, and K. P. Lavrovskiy, Corresponding Member, AS USSR, for valuable advice, and they also thank N. N. Naymushin for his assistance in carrying out gas analyses. There are 2 figures, 2 tables, and 5 references, 4 of which are Soviet.

ASSOCIATION: Institut nefti Akademii nauk SSSR (Petroleum Institute of the Academy of Sciences, USSR)

PRESENTED: June 4, 1958, by S. I. Mironov, Academician

SUBMITTED: June 3, 1958

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BRODSKIY, A.M.; LAVROVSKIY, K.P.; NAYMUSHIN, N.N.; TITKOV, V.B.;  
FILATOVA, Ye.D.

Chromatographic analysis of mixtures of alkynes and diolefins.  
Khim. i tekhn. topl. i masel 4 no.3:30-32 Mr '59.

(MIRA 12:4)

1. Institut nefti AN SSSR.  
(Chromatographic analysis) (Olefins)

S/062/60/000/008/010/012  
B004/B054

AUTHORS: Brodskiy, A. M., Lavrovskiy, K. P., and Filatova, Ye. D.

TITLE: High-temperature Dehydrogenation of Ethyl Benzene 7

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,  
1960, No. 8, pp. 1490-1494

TEXT: The authors report on their investigations of the kinetics of de-hydrogenation of ethyl benzene at temperatures between 660 and 740°C. They discuss data in publications (Refs. 2, 3), and explain contradictions by the fact that at high temperatures the styrene yield depends on the reaction period. To obtain a high styrene yield it was necessary to guarantee a short reaction period and a quick, steady heating. This was attained by means of a pseudoliquid coke powder layer. Fig. 1 shows the experimental arrangement. Heating was performed by a graphite spiral passed through by current. The ethyl benzene gasified and mixed with CO<sub>2</sub> or N<sub>2</sub> was introduced from below into the reaction tube (diameter 40 mm). 50 cm<sup>3</sup> of coke (particle diameter 0.1 - 0.5 mm) were piled on a screen. CO<sub>2</sub> was admixed at the outlet of the reaction tube for a quick cooling and rarefaction of the

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3004/B04

reaction product. The latter was collected in vessels cooled with liquid nitrogen. In the distillate, the styrene was determined by the iodine number, and the amount of the resulting benzene and toluene by fractionation. Table 1 lists the experimental results at 660, 690, 720, and 740°C and the reaction period  $t$ . The styrene yield was 66% at 660°C, and 70-75% at higher temperatures. Benzene and toluene yields were about 1.5% at 720°C, and 8-10% at 740°C. Replacement of the coke powder by quartz powder did not change the test results. Equation (6) is written down for evaluating the experimental data:  $1/(1 - \pi) = 1 + k(t/\alpha)$ , ( $\pi$  = styrene content of the distillate,  $k$  = reaction constant,  $\alpha$  = coefficient of volume increase of the reacting gases). The graphic representation  $1/(1 - \pi) = f(t)$  in Fig. 2 confirms the course of a first-order reaction. Hence, the reaction constant for the four test temperatures was calculated (Table 2). Fig. 3 shows the function  $\ln k = f(1/T)$ . The activation energy was found to be 44 ± 2 kcal/mole. There are 3 figures, 2 tables, and 8 references: ✓  
6 Soviet and 2 US.

ASSOCIATION: Institut neftekhimicheskogo sinteza Akademii nauk SSSR  
(Institute of Petroleum-chemical Synthesis of the Academy  
of Sciences, USSR)

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High-temperature Dehydrogenation of Ethyl Benzene S/052/60/000/008/0-0/012  
B004/B054

SUBMITTED: March 16, 1959

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5(3)

AUTHORS: Petrov, A. D., Sadykh-Zade, S. I., SOV/79-29-9-26/76  
Filatova, Ye. I.

TITLE: On the Addition of Hydrosilanes to  $\alpha,\beta$ -Unsaturated Acids and Their Esters

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 9, pp 2936-2939  
(USSR)

ABSTRACT: Recently the authors found (Ref 1) that trialkyl- and aryl alkyl silanes add to  $\alpha,\beta$ -unsaturated aldehydes and ketones only in 1,4-position in the presence of a 0.1n. solution of  $H_2PtCl_6$  in isopropyl alcohol, under the formation of silicon-containing vinyl ethers. They investigated this reaction on the basis of acrylic aldehyde, methylvinyl ketone, and their various analogs with substituents in  $\beta$ -position. It was an interesting experiment to add the hydrosilanes also to the  $\alpha,\beta$ -unsaturated acids and their esters, all the more as publications (Ref 2) describei the addition of methyl dichloro silane to methylacrylate in the presence of platinum on carbon in the autoclave at a heating of sixteen hours' duration at  $125^\circ$ ; a simultaneous addition in both the 1,4- and 1,2-position was found to take place. It was, therefore, not

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possible to deny a priori the influence exerted by experimental conditions on the order of addition. The below-mentioned experimental results obtained by the authors showed that also under their conditions methyl dichloro silane adds to methylacrylate simultaneously in 1,2- and 1,4-position. It was further found that trichloro silane adds only in 1,2-position to this ester, and triethylsilane only in 1,4-position (this holds also for the free acid). Thus, it was found that the order of addition changes gradually in the replacement of the alkyl radicals in the trialkylsilanes by the more electronegative halogen radicals (Scheme). Trialkylsilane adds also to methyl methacrylate in 1,2-position, which indicates that the order of addition depends also on the structure of the  $\alpha,\beta$ -unsaturated carbonyl compounds. The addition of alkyl dichlorosilanes in the presence of  $H_2PtCl_6$  proceeds in the same way as in heating with platinum on carbon, i.e. simultaneously in 1,2- and 1,4-position. There are 8 references, 3 of which are Soviet.

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Acids and Their Esters

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ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute  
of Organic Chemistry of the Academy of Sciences, USSR)

SUBMITTED: September 4, 1958

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